

DEVELOPING TRAINING INDEX AND PREFERENCE OF TRAINING METHODS FOR KVK TRAINING PROGRAMMES IN TAMIL NADU

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ABSTRACT

In India, KVKs conducted trainings at various levels for which the programmes are designed based on the clientele problems and their needs and interests. The success of the training depends on training effectiveness and impact of the training. In Karur District, Out of eight blocks, only two blocks were purposively selected for this study entitled on Developing training index and preference of training methods for KVK training programmes among Karur district farmers in Tamil Nadu. Totally 300 respondents were selected for the study through random sampling method. The trainees of KVK were selected and studied how far the learned technologies/skills were utilized by the farmers in their back home situations. Based on the thesis feedback, training index was prepared for Crop production, Horticulture, Plant protection and animal science oriented trainings. Majority of the respondents needed integrated crop management related trainings in both the agricultural and horticultural crops. In both the blocks dairy component was the major one. So, more number of respondents preferred dairy farming related trainings. Majority of the respondents have ranked Demonstration / Hands on experience as their first priority of training method followed by field visit. It is also suggested that, KVK should give more importance on ICT related trainings to farmers.

KEYWORDS: KVK; Types of Trainings; Participation; ICT; Training Index & Training Methods

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INTRODUCTION

Training is a means of making agriculture a better and more profitable business. Our progress in agriculture depends on the development of human capital through an effective system of training. In India, KVKs conducted trainings at various levels for which the programmes are designed based on the clientele problems and their needs and interests. The success of the training depends on training effectiveness and impact of the training i.e., what happens during training, but also on what happens before the actual training and what happens after the training. Since the study was an ex- post facto, it was envisaged to estimate the impact of the KVK training programmes through a feedback. The trainees of KVK were selected and studied how far the learned technologies/skills were utilized by the farmers in their back home situations.

Need for the Study

The farmers are adopting the new technologies in their system at micro and macro level. They must be constantly fed with recent know-how. Training plays an important role in imparting latest technical knowhow to the farmers. Large numbers of training programmes were imparted for the benefits of farmers every year, despite their

training impact were considered with least interest. The training brings out the required change in the individual's behaviour for improving his performance. Hence it is essential to identify the training index and training methods used by the KVK, therefore the study entitled, "Developing training index and preference of training methods for KVK training programmes among the Farmers of Karur District in Tamil Nadu" was taken up. Based on the above facts, the study was undertaken with the following objectives:

- To study the preference of training methods towards the conduct of KVK trainings
- To develop the training index for assessing effectiveness of the trainings imparted by KVK.

Scope and Importance of the Study

The findings of preference of training methods and developing training index would help the extensionists to concentrate their efforts on popularization of advanced production technologies among the farming community through training programmes. Most of the farmers preferred demonstration method trainings for their easy understanding (Illakkia, 2007). The study would bring out the profile characteristics of the respondents, training index and preference of training methods which would be utilized for further strengthening of KVK trainings. More number of trainings was needed by middle aged farmers (Adamu et al. (2013) in adopting advanced production technologies. The findings of the study would help to the KVKs in formulating different strategies suited for the appropriate clientele.

MATERIALS AND METHODS

At present Tamil Nadu has 30 KVKs under different organizations like Agricultural University, ICAR Institutes and Non-Governmental Organizations, out of which only one KVK situated in Karur District was selected purposively for the study, because one of the KVK gives more number of trainings to farmers. Karur district consists of five Taluks and eight blocks. Out of eight blocks of Karur district only two blocks and one taluk were purposively selected for this study, because in these blocks, maximum numbers of trainings have been conducted by KVK, Karur. To carry out the present investigation, Karur district was purposively selected because of different cropping systems are followed by the farmers. Karur district comes in three Agro-climatic zones viz., Cauvery delta zone, Western and Southern Zone. So, the farmers are cultivating various crops like paddy, banana, sorghum, red gram, black gram, groundnut, sesamum, sunflower, brinjal, bhendi, chillies, moringa, and enterprises viz., dairy, sheep, goat and poultry.

The main objective of the study was to develop training index and study the preference of training methodology of the respondents towards the conduct of KVK trainings. The farmers who attended the training programmes in the year 2010 to 2015 were selected as sample for the present study. For the selection of respondents, a list of trainees from the selected blocks viz., Kulithalai and Thogaimalai were prepared with the help of KVK. For each block, those who attended frequently (150 farmers) in KVK training programmes (Table 1) were selected randomly, totally 300 respondents were selected for the study through random sampling method. In formulating questions and statements for interview schedule the investigator referred the review of related literature, Popular articles, Research reports and consulted with the Advisory Committee and Krishi Vigyan Kendra to seek and invite their opinion and suggestions to make the interview schedule more scientific and meaningful. The data was collected following personal interview method by investigator himself. The respondents were interviewed personally, either at their home or at community place or at their field. Every possible care was taken to maintain congenial atmosphere to get unbiased response from respondents. Percentage, Arithmetic mean, Standard deviation, Chi – square test: Karl Pearson's Correlation Coefficient (r), Multiple regression analysis, Independent

't' test and Garrett Ranking techniques were used in the study.

Respondent's Preference towards Training Methods

Training methods describes the standard procedures or approaches designed to help individuals or groups in acquiring the skills needed for specific activities or functions. The scoring procedure developed by N. Jayaraj (2013) was followed. Lecture alone, Lecture + Audio Visual aids, Demonstration/ Hands on experience, Field visit, Discussion forum, Films & Video lessons, Exhibition, Seminars and ICT tools were found as common training methods used. Each respondent was asked to state the preferred method of training and their preference was expressed in ranks.

Training Index Developed for the Study

KVK provide variety of trainings that include on campus, off campus, vocational trainings to farmers, rural youth and farm women. A list of trainings organized by KVK was obtained from the KVK training registers, and from the list, five years training programmes were selected for the study purpose. Thus, if a farmer prefers five trainings out of seven trainings to the improvement of his farming, the training index will be 83 ($=5/7*100$). It will help the KVK to assess what type of trainings needed by the farmers. Training index was referred as number of trainings a farmer had undergone but, he needed only useful trainings repeatedly. It was calculated by using the formula,

Trainings preferred by

The farmer

Training

Index (%) = $\frac{\text{Trainings preferred by}}{\text{Total number of trainings}} * 100$

Total number of trainings

RESULTS AND DISCUSSIONS

Participation in KVK Training Programmes

In KVK, Karur Programme Coordinator and Subject Matter Specialists were provided more number of trainings in Crop production, Horticulture, Plant Protection, Home Science and Animal Husbandry. So, these training programmes were purposively selected for this study. The findings are presented in Table 2

Training Index Developed for Crop Production Trainings

Among the trainings, the participation was very high (77.33 %) with respect to integrated crop management followed by advanced production technologies in agricultural crops (52.33 %), management of problematic soils (33.67 %), production and use of organic inputs (32.67 %) and crop diversification (15 %). It could be inferred that all the adopted trainings would have impacted the farmers and therefore they continue to adopt the recommended crop production practices given by KVK trainings. However, the training on crop diversification was received lowest participation score of 15 per cent. Further, to have a better understanding of the participation of KVK trainings by the farmers, the training index was presented. Totally five types of trainings like integrated crop management practices in agricultural crops, advanced production technologies in agricultural crops, management of problematic soils, production and use of organic inputs and crop diversification were conducted by KVK in the year 2011-2015.

Training index of crop production oriented trainings = 80 %

Based on the training index, majority of the respondents preferred integrated crop management practices in agricultural crops viz., paddy, sorghum, pulses and oilseeds. Because, Farmer wants the total package of practices in land preparation to Post harvest technologies in any crop cultivation. To solve the problems like low yield, labour scarcity and pest problem farmers need new technologies. So, advanced production technologies in agricultural crops related trainings were needed by farmers. Above mentioned trainings were very useful to increase their crop yield and reduce their cost of cultivation. Based on this, training index of crop production oriented trainings were analysed and given. Due to the respondents had low level of scientific orientation and risk orientation capacity, they were not preferred crop diversification related trainings.

Training Index Developed for Horticulture Trainings

Among the trainings in horticulture, the participation was very high with respect to Improved production technologies in horticultural crops (70.67 %) followed by nursery raising techniques (49.33 %), integrated crop management in banana (41.33 %) and cultivation of fruit crops (29.67 %). Totally four types of trainings were conducted by KVK in the year 2011-2015.

Training index of Horticulture oriented trainings = 75 %

Based on the training index, farmers preferred the trainings on improved production technologies in horticultural crops. Farmer wants to increase their income level. So, they had more interest in improved production technologies like high density planting in banana, drip irrigation and farm mechanization. Majority of the respondents were not preferred training programmes on cultivation of fruit crops. So, KVK should concentrate more training programmes in improved production technologies in horticultural crops.

Training Index Developed for Plant Protection Trainings

In Plant Protection the participation was very high in integrated pest & disease management (70 %), followed by production and use of bio control agents and bio pesticides (30.33), vermi-compost production (32.33 %) and mushroom production (20 %). Totally, four types of trainings were conducted by KVK in the year 2011-2015.

Training index of plant protection oriented trainings = 75 %

Based on the training index, majority of the respondents were preferred the trainings on integrated pest & disease management in major crops viz., paddy, banana, red gram, groundnut, sesamum, brinjal, bhendi and tapioca. It would be useful to reduce the cost of cultivation. Due to marketing problem, farmers were not preferred trainings on mushroom production. So, KVK would arrange more marketing linkages to farmers is very essential.

Training Index Developed for Home Science Trainings

It is observed that the participation in post harvest technologies was more than 54 %, followed by value addition (40.33 %), drudgery reduction techniques (32.33 %), food adulteration and its ill effects (30.67 %) and banana fibre extraction and handicraft making (21.67 %).

Training index of home science oriented trainings = 60 %

In above mentioned trainings, farmers preferred the training on post harvest technologies in major crops. It would

be useful for reduce the crop loss after the harvest. Due to labour scarcity majority of the respondents were not preferred the trainings on banana fibre extraction and handicraft making. They are willing to produce value added products in banana like banana pickle, cookies, thokku, etc., So, KVK would provide more number of training programmes on value addition in banana.

Training Index Developed for Animal Husbandry Trainings

In Animal husbandry, farmers are more interested to participate in training on dairy management (62.67 %), followed by animal nutrition management (48.33 %), goat farming (44 %), integrated farming (37.33 %) and poultry management (33 %) and animal disease management (28 %).

Training index of animal science oriented trainings = 67 %

Most of the farmers had dairy cows for their additional income. So, they want to know about the clean milk production and feed management practices. It would be the main reason for majority of the respondents preferred the trainings on dairy management. This finding is similar to that of Santha Govind (1992). The above findings (Table 3) reveal that farmers were having high level of knowledge on crop production technologies. The reason might be the farmers in Kulithalai taluk were having high supplemental irrigation sources. So, they need more information about recommended crop cultivation techniques. This makes the farmers to have high mass media exposure, more extension system linkage for acquiring knowledge on crop production techniques. In future, KVK, Karur should concentrate more training programmes in Home Science and Animal husbandry related aspects.

Respondent's Preference towards the Training Methods

It is found from the Table 4(Fig.1) that majority of the respondents have ranked Demonstration / Hands on experience (80.32 %) as their first priority of training method for imparting technology related trainings followed by field visit (67.59 %). It is also revealed that the third, fourth and fifth ranks were found to be Discussion forum, Lecture + Audio Visual aids and Lecture + Internet respectively. Last five ranks like, six, seven, eight, nine and ten were given to Exhibition, Films & Video lessons, Lecture, ICT tools and Seminar respectively. The reason behind for this scenario is, most of the respondents felt demonstration method provides clear understanding and practical knowledge about a new technology than the lecture method. As the lecture mode fails to stimulate more number of senses it might have not demanded by the farmers (Venkatesan, 1997). Lecture method provides theoretical exposure alone; its administration without visual demonstration may lead to ambiguity among the respondents. Minimum number of farmers only selected the ICT related training methods is effective method. Lack of awareness on ICT tools might be the reason. So, KVK must create more awareness and skill trainings on ICT tools.

CONCLUSIONS

KVK training is an essential component for the successful dissemination and large scale adoption of latest agricultural technologies in a social system particularly among farming communities. Majority of the farmers needed integrated crop management related trainings in both agricultural and horticultural crops. It includes land preparation, seed selection, sowing and intercultural operations of a particular crop. So, KVK would plan and provide the training programmes on integrated crop management (ICM) aspects. KVKs should choose their training method as hands on experience mode. This would be useful for both literates and illiterates. KVK should create more awareness about ICT

related trainings to farmers. Through ICT related trainings the farmers would diagnose the field problem correctly. So, they contact the extension officials via cell phone and get the solution immediately. It will save time for both farmer and extension official and also reduce the cost of cultivation to farmers. Based on the findings, training should be need based and content should cover the technical and practical problems faced by the farmers in their existing field conditions and should provide a solution to their specific field problem. If these problems are solved then more number of farmers might be attracted and participated in training programmes of KVKs.

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ANNEXURE

Table 1: Names of Selected Villages and Blocks

S. No	Name of the Selected Block	Name of the Selected Villages	Number of Selected Respondents
			Sample
1	Thogaimalai	R.T.Malai	34
2		Alathur	35
3		Neidhalur	28
4		Mudhalaipatti	29
5		Thogaimalai	24
6	Kulithalai	Kumaramangalam	31
7		Vaigainallur	25
8		Suriyanur	31
9		Inungur	33
10		Vathiyam	30
		Total	300

**Table 2: Participation of Respondents in KVK Trainings
(n=300)**

S. No	Name of the Training	Number of Respondents*	Percent
I.	Crop Production		
1	Integrated Crop Management in Agricultural crops	232	77.33
2	Advanced Production Technologies in Agricultural crops	157	52.33
3	Management of Problematic soils and Soil Sampling techniques	101	33.67
4	Production and use of organic inputs	98	32.67
5	Crop Diversification	45	15.00
II.	Horticulture		

1	Improved production technologies in Horticultural crops	212	70.67
2	Nursery raising techniques	148	49.33
3	Integrated Crop Management in Banana	124	41.33
4	Cultivation of fruit crops	89	29.67
III.	Plant Protection		
1	Integrated Pest & Disease Management	210	70.00
2	Production and use of bio control agents and bio pesticides	91	30.33
3	Vermi-compost production	97	32.33
4	Mushroom production	60	20.00
IV.	Home Science		
1	Post Harvest Technologies in major crops	162	54.00
2	Value addition in major crops	121	40.33
3	Drudgery reduction techniques	97	32.33
4	Food adulteration and its ill effects	92	30.67
5	Banana fibre extraction and handicraft making	65	21.67
V.	Animal Sciences		
1	Dairy Management	188	62.67
2	Animal Nutrition Management (Feed & Fodder technology)	145	48.33
3	Goat Farming	132	44.00
4	Integrated Farming	112	37.33
5	Poultry Management	99	33.00
6	Animal Disease Management	84	28.00

(Number of respondents *- Multiple response)

Table 3: Training wise Training Index

S. No	Trainings	Training Index
1	Crop production	80 %
2	Horticulture	75 %
3	Plant Protection	75 %
4	Animal Husbandry	67 %
5	Home Science	60 %

Table 4: Respondents Preference towards Training Methods
(n=300)

S. No	Preferred Training Method	Mean Score	Rank
1	Demonstration/ Hands on experience	80.32	I
2	Field visit	67.59	II
3	Discussion forum	63.81	III
4	Lecture + Audio Visual aids	53.61	IV
5	Lecture + Internet	50.78	V
6	Exhibition	43.24	VI
7	Films & Video lessons	38.67	VII
8	Lecture method	30.55	VIII
9	ICT tools	29.00	IX
10	Seminar	19.28	X

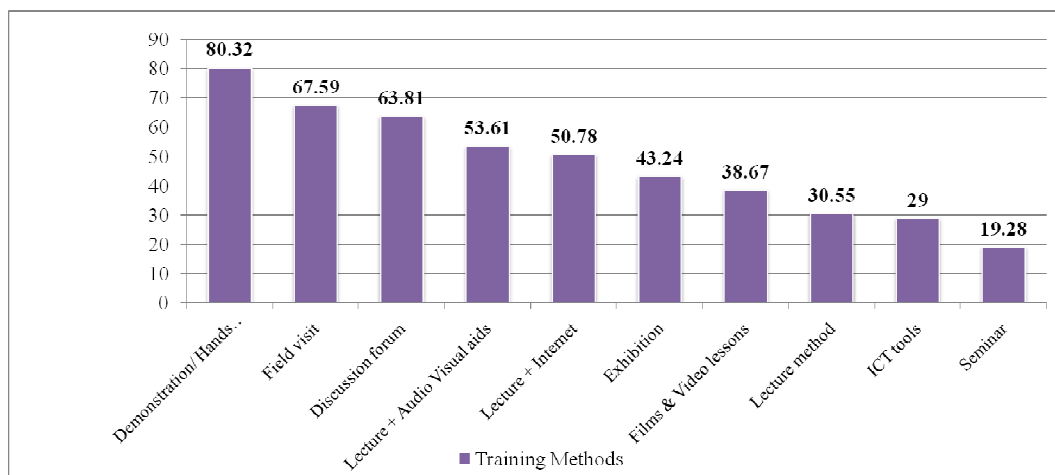


Figure 1: Training Methods